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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/866,647	05/30/2001	Osamu Iemoto	1573.1006	5798

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EXAMINER

BELL, MELTIN

ART UNIT	PAPER NUMBER
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2121

DATE MAILED: 01/15/2004

4

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/866,647

Applicant(s)

IEMOTO ET AL.

Examiner

Meltin Bell

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 5/30/01.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-23 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-23 is/are rejected.
- 7) ☒ Claim(s) 7 and 16 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 May 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☒ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2. 6) ☐ Other: _____

DETAILED ACTION

This action is responsive to application **09/866,647** filed 05/30/01.

Claims 1-23 have been examined.

Priority

Applicant is advised of possible benefits under 35 U.S.C. 119(a)-(d), wherein an application for patent filed in the United States may be entitled to the benefit of the filing date of a prior application filed in a foreign country.

Acknowledgment is made of applicant's claim for foreign priority based on an application number 2000-398404 filed in Japan on **12/27/00**.

Information Disclosure Statement

Applicant is respectfully reminded of the ongoing Duty to disclose 37 C.F.R. 1.56 all pertinent information and material pertaining to the patentability of applicant's claimed invention, by submitting in a timely manner PTO-1449, Information Disclosure Statement (IDS) with the filing of applicant's application or thereafter.

Drawings

The United States Patent and Trademark Office of Draftsperson's Patent Drawings Review have reviewed the formal drawings. They are objected to by the Draftsperson

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under 37 CFR 1.84 or 1.152 for the reasons indicated on the Form PTO-948, Notice of Draftsperson's Patent Drawing Review.

The drawings have not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is required in correcting any errors of which applicant may become aware in the drawings.

The drawings are objected to because:

- DB items 122, 124 and 126 should be encapsulated in a server 100 memory.
- The "scale of required time" in FIG. 4 and on line 26 of page 5 might be better presented as Long/Short instead of Brief/Detail.
- Item 102 should have "storage device" in its FIG. 1 name as suggested on page 6, line 14.
- Item 126 in FIG. 1 should read as given on line 35 of page 6, "user's learning history..."
- The 'S' should be removed from the items/steps in FIGS. 2 and 5.
- Item 500 should have "virtual world" in the FIG. 8 name as suggested on page 21, line 22.

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Specification

The specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is required in correcting any errors of which applicant may become aware in the specification.

The disclosure is objected to because of the following informalities:

- The following and other references in the specification should be supplied in an IDS with translations in the English (U.S.) language where appropriate:
 - Patents pursued by David M. Siefert on page 1, lines 19-24
 - Documentation for the “well-known Y-G personality trait test” on page 8, line 23.
- Storage device 133 should be storage device 136 on page 7, line 31.
- Table 1 is missing the “lack of objectivity (O)” personality trait of page 8, line 28.
- The location of “memory work area” on line 5 of page 10 should be specified in the Figures by item number.
- The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed. The following title is suggested: Computer-Assisted Education Apparatus and Method.

Appropriate correction is required.

Claim Objections

Claims 7 and 16 are objected to because their limitations are similar, but dependencies are different: claim 7 depends on another dependent claim (e.g. claim 6 which depends on independent claim 1) while claim 16 depends on independent claim 10.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

The invention as disclosed in claim 19 is directed to non-statutory subject matter. Claim 19 is rejected under 35 U.S.C. 101 because the claimed invention is not supported by either a credible asserted utility or a well established utility.

As a method, claim 19 offers abstract ideas (e.g. "teaching material", "questionnaire", "answer", "trait") that are also not applied in the technological arts. Abstract ideas and their manipulation constitute "descriptive material" that is not patentable, *Warmerdam*, 33 F.3d at 1360, 31 USPQ2d at 1759 and *Schrader*, 22 F.3d at 292-93, 30 USPQ2d at 1457-58, respectively. If the abstract ideas of claim 19 represented functional descriptive material consisting of data structures and computer programs which impart functionality when employed as a computer component (recorded on some computer readable medium), they become structurally and

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functionally interrelated to the medium and will be statutory in most cases since use of technology permits the function of the descriptive material to be realized. For examples,

- *In re Lowry*, 32 F.3d 1579, 1583-84, 32 USPQ2d 1031, 1035 (Fed. Cir. 1994) offers claim to data structure stored on a computer readable medium that increases computer efficiency held statutory and
- *Warmerdam*, 33 F.3d at 1360-61, 31 USPQ2d at 1759 offers product-by-process claim to computer having a specific data structure stored in memory also held statutory while
- *Warmerdam*, 33 F.3d at 1361, 31 USPQ2d at 1760 offers claim to a data structure *per se* held nonstatutory.

Because the claim is not claimed to be practiced on a computer and stored on a computer readable medium, it is not limited to practical applications in the technological arts. Specifically, the claim is a method without any particular practical application, such as a program running on a computer and stored in a computer readable medium or memory. On that basis alone, this claim is clearly nonstatutory.

Claim 19 is rejected under 35 U.S.C. 101 because the claimed invention is not supported by either a credible asserted utility or a well established utility. Claim 19 is also rejected under 35 U.S.C. 112, first paragraph. Specifically, since the claimed invention is not supported by either a credible asserted utility or a well established utility for the reasons set forth above, one skilled in the art clearly would not know how to use the claimed invention.

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Claim Rejections - 35 USC § 112

To expedite a complete examination of the instant application, the claims rejected under 35 U.S.C. 101 (nonstatutory) above are further rejected as set forth below in anticipation of applicant amending these claims to place them within the four statutory categories of invention.

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 19 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. Support for this 35 U.S.C. 112, first paragraph rejections comes from MPEP 2164.07(I)(A):

"As noted in *In re Fouché*, 439 F.2d 1237, 169 USPQ 429 (CCPA 1971), if "compositions are in fact useless, appellant's specification cannot have taught how to use them." 439 F.2d at 1243, 169 USPQ at 434. The examiner should make both rejections (i.e., a rejection under 35 U.S.C. 112, first paragraph and a rejection under 35 U.S.C. 101) where the subject matter of a claim has been shown to be nonuseful or inoperative. The 35 U.S.C. 112, first paragraph, rejection should indicate that because the invention as claimed does not have utility, a person skilled in the art would not be able to use the invention as claimed, and as such, the claim is defective under 35 U.S.C. 112, first paragraph."

Claim Rejections - 35 USC § 102

To expedite a complete examination of the instant application, the claims rejected under 35 U.S.C. 101 (nonstatutory) above are further rejected as set forth below in anticipation

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of applicant amending these claims to place them within the four statutory categories of invention.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-23 are rejected under 35 U.S.C. 102(b) as being anticipated by *Siefert* U.S.

Patent Number 5,810,605 (September 22, 1998).

Regarding claim 1:

Siefert teaches,

- a memory having a first memory area for storing a plurality of teaching material elements including text, video and/or audio data, and having a second memory area for storing teaching material presentation patterns (column 6, lines 34-36, "The person, or...of the REPOSITORY"; column 6, lines 45-64, "Each RESOURCE Has...of the cards"; column 8, lines 67-61, "RESOURCES include all...programs which teach"; column 13, lines 66-67, "The learning of...the student to"; column 14, lines 1-4, "master in overall...learned in parts")

- first processor means for providing a questionnaire to a user and analyzing an answer to said questionnaire to determine a trait of said user related to personality, and for determining a teaching material presentation pattern for said user in accordance with said determined trait of said user to store the determined teaching material presentation

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pattern in said second memory area (column 6, lines 22-25, "If the RESOURCE... and launches it")

- second processor means for retrieving said teaching material presentation pattern for said user from said second memory area, selecting and editing ones of a plurality of teaching material elements of a specific subject in said first memory area in accordance with said teaching material presentation pattern to generate a teaching material module, and presenting said teaching material module to said user in accordance with said teaching material presentation pattern (FIG. 1)

- third processor means for analyzing learning behavior of said user during a learning process of said user using said presented teaching material module in accordance with said teaching material presentation pattern, modifying said teaching material presentation pattern in accordance with said analysis, and storing said modified presentation pattern in said second memory area (column 4, lines 60-67, "CLS Uses Multiple... available telephone channels")

Regarding claim 2:

Siefert further teaches,

- said second processor means further retrieves said modified teaching material presentation pattern for said user from said second memory area, selects and edits ones of said plurality of teaching material elements of said specific subject in said first memory area in accordance with said modified presentation pattern to generate another teaching material module, and presents said other teaching material module to said

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user in accordance with said modified presentation pattern (column 15, lines 53-67, "The computer system... and practice situations")

Regarding claim 3:

The rejection of claim 1 is incorporated. Therefore, claim 3 is rejected under the same rationale as claim 1.

Regarding claim 4:

Siefert further teaches,

- said teaching material presentation pattern defines specific magnitudes related to difficulty, required time and dissimilarity of the teaching material elements (column 3, lines 33-43, "The invention includes... of the student"; column 4, lines 10-18, "If a student... to offer coaching"; column 8, lines 40-44, "Significant personalized information... or facilitate teaching"; column 9, lines 50-55, "The IA logs... Subject Matter Expert")

Regarding claim 5:

Siefert further teaches,

- questionnaire comprises first and second portions and said second portion of said questionnaire is determined depending on an answer to said first portion of said questionnaire and is provided after said first portion of said questionnaire is provided (column 7, lines 13-25, "The LEARNING PROFILE... LEARNING PROFILE generation"; column 9, lines 1-25, "Based on PROFILES... given by computer")

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Regarding claim 6:

Siefert further teaches,

- said first processor means analyzes the answer to said questionnaire to further determine a trait of said user related to general life attitude (column 14, lines 4-23, "The main external...conditions of Gagne"; Table 4.2)

Regarding claim 7:

Siefert further teaches,

- said first processor means determines said trait of said user related to learning attitude in accordance with said personality trait and said trait of general life attitude (column 12, lines 65-67, "Gagne classified all...skills, and attitudes"; column 13, lines 1-33, Examples of these...some are "external"; Table 3.1)

Regarding claim 8:

Siefert further teaches,

- said teaching material element is a video clip (column 16, lines 53-59, "CLS identified Unit...begins Unit 1")

Regarding claim 9:

The rejection of claim 1 is incorporated. Therefore, claim 9 is rejected under the same rationale as claim 1.

Regarding claim 10:

Siefert teaches,

- a memory and a processor, said memory having a first memory area for storing a plurality of teaching material elements including text, video and/or audio data, and

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having a second memory area for storing a teaching material presentation pattern, said program enabling said processor to perform the steps of: (column 6, lines 22-25, "If the RESOURCE...and launches it"; column 6, lines 34-36, "The person, or...of the REPOSITORY"; column 6, lines 45-64, "Each RESOURCE Has...of the cards"; column 8, lines 57-61, "RESOURCES include all...programs which teach"; column 13, lines 66-67, "The learning of...the student to"; column 14, lines 1-4, "master in overall...learned in parts")

- providing a questionnaire to a user and analyzing an answer to said questionnaire to determine a trait of said user related to personality (column 12, lines 20-28, "the matched students...different personality characteristics")

- determining a teaching material presentation pattern for said user in accordance with said determined trait of said user to store the determined teaching material presentation pattern in said second memory area (column 7, lines 13-17, "The LEARNING PROFILE...loaded into CLS")

- retrieving said teaching material presentation pattern for said user from said second memory area, selecting and editing ones of a plurality of teaching material elements of a specific subject in said first memory area in accordance with said teaching material presentation pattern to generate a teaching material module, and presenting said teaching material module to said user in accordance with said teaching material presentation pattern (column 13, lines 66-67, "The learning of...the student to"; column 14, lines 1-4, "master in overall...learned in parts"; column 15, lines 62-64, "the computer will...subject is requested")

- analyzing learning behavior of said user during a learning process of said user using said presented teaching material module in accordance with said teaching material presentation pattern, modifying said teaching material presentation pattern in accordance with said analysis, and storing said modified presentation pattern in said second memory area (column 11, lines 46-56, "a standard set...the characteristics themselves")

Regarding claim 11:

Siefert further teaches,

- enabling said processor to perform the step of retrieving said modified teaching material presentation pattern for said user from said second memory area, selecting and editing ones of said plurality of teaching material elements of said specific subject in said first memory area in accordance with said modified presentation pattern, to generate another teaching material module, and presenting said other teaching material module to said user in accordance with said modified presentation pattern (column 15, lines 53-67, "The computer system...and practice situations")

Regarding claim 12:

The rejection of claim 10 is incorporated. Therefore, claim 12 is rejected under the same rationale as claim 10.

Regarding claim 13:

Siefert further teaches,

- said teaching material presentation pattern defines specific magnitudes related to difficulty, required time and dissimilarity of the teaching material elements (column 3,

lines 33-43, "The invention includes...of the student"; column 4, lines 10-18, "If a student...to offer coaching"; column 8, lines 40-44, "Significant personalized information...or facilitate teaching"; column 9, lines 50-55, "The IA logs... Subject Matter Expert")

Regarding claim 14:

Siefert further teaches,

- said questionnaire comprises first and second portions, and said second portion of said questionnaire is determined depending on an answer to said first portion of said questionnaire, and is provided after said first portion of said questionnaire is provided (column 7, lines 13-25, "The LEARNING PROFILE...LEARNING PROFILE generation"; column 9, lines 1-25, "Based on PROFILES...given by computer")

Regarding claim 15:

Siefert further teaches,

- the step of providing a questionnaire and, determining a trait comprises analyzing the answer to said questionnaire to further determine a trait of said user related to general life attitude (column 14, lines 4-23, "The main external...conditions of Gagne"; Table 4.2)

Regarding claim 16:

Siefert further teaches,

- the step of providing a questionnaire and determining a trait comprises determining said trait of said user related to learning attitude in accordance with said personality trait and said trait of general life attitude (column 12, lines 65-67, "Gagne classified

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all...skills, and attitudes”; column 13, lines 1-33, Examples of these... some are “external”; Table 3.1)

Regarding claim 17:

Siefert further teaches,

- said teaching material element is a video clip (column 16, lines 53-59, “CLS identified Unit...begins Unit 1”) —

Regarding claim 18:

The rejection of claim 10 is incorporated. Therefore, claim 18 is rejected under the same rationale as claim 10.

Regarding claim 19:

Siefert teaches,

- providing a questionnaire to a user and analyzing an answer to said questionnaire to determine a trait of said user related to personality (column 12, lines 20-28, “the matched students...different personality characteristics”)

- determining a teaching material presentation pattern for said user in accordance with the trait of said user (column 7, lines 13-17, “The LEARNING PROFILE...loaded into CLS”)

- selecting and editing ones of a plurality of teaching material elements of a specific subject in accordance with said teaching material presentation pattern for said user to generate a teaching material module, and presenting said teaching material module to said user in accordance with said teaching material presentation pattern (column 13, lines 66-67, “The learning of...the student to”; column 14, lines 1-4, “master in

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overall...learned in parts”; column 15, lines 62-64, “the computer will...subject is requested”)

- analyzing learning behavior of said user during a learning process of said user using said presented teaching material module, and modifying said teaching material presentation pattern in accordance with said analysis (column 11, lines 46-56, “a standard set...the characteristics themselves”)

Regarding claim 20:

Siefert further teaches,

- the step of retrieving said modified teaching material presentation pattern for said user from said second memory area, selecting and editing ones of said plurality of teaching material elements of said specific subject in said first memory area in accordance with said modified presentation pattern to generate another teaching material module, and presenting said other teaching material module to said user in accordance with said modified presentation pattern (column 15, lines 53-67, “The computer system...and practice situations”)

Regarding claim 21:

Siefert further teaches,

- said teaching material presentation pattern defines specific magnitudes related to difficulty, required time and dissimilarity of the teaching materials (column 3, lines 33-43, “The invention includes...of the student”; column 4, lines 10-18, “If a student...to offer coaching”; column 8, lines 40-44, “Significant personalized information...or facilitate teaching”; column 9, lines 50-55, “The IA logs...Subject Matter Expert”)

Regarding claim 22:

Siefert further teaches,

- the step of providing a questionnaire and determining a trait comprises analyzing the answer to said questionnaire to further determine a trait of said user related to general life attitude (column 14, lines 4-23, "The main external... conditions of Gagne"; Table 4.2)

Regarding claim 23:

Siefert further teaches,

- said teaching material module presented to said user is provided to an information processing terminal of said user (column 4, lines 60-67, "CLS Uses Multiple... available telephone channels"; FIG. 1)

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

- *Siefert*; U.S. Patent Number 5,810,605
- *Siefert*; U.S. Patent Number 5,904,485; Automated Lesson Selection and Examination in Computer-Assisted Education
- *Von Kohorn*; U.S. Patent Number 5,227,874; Method for Measuring the Effectiveness of Stimuli on Decisions of Shoppers
- *Boulton et al*; U.S. Patent Number 5,537,618; Method and Apparatus for Implementing User Feedback

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- *Siefert*; U.S. Patent Number 6,386,883; Computer-Assisted Education
- *Siefert*; U.S. Patent Application Number 2001/0055749; Computer-Assisted Education
- *Akazawa et al*; U.S. Patent Application Number 2002/0113809; Apparatus and method for providing virtual world customized for user
- *Siefert*; European Patent Number EP 0 710 943 A2; A computer-assisted educational system
- *Siefert*; European Patent Number EP 0 710 942 A2; A computer-assisted system for instructing students
- *Siefert*; European Patent Number EP 0 913 798 A2; Method and system for monitoring and enhancing computer-assisted performance
- *Siefert*; Japanese Patent Number JP 08227266 A; COMPUTER-ASSISTED TEACHING SYSTEM
- *Siefert*; Japanese Patent Number JP 08227265 A; COMPUTER-AIDED TEACHING SYSTEM

Any inquiry concerning this communication or earlier communications from the Office should be directed to Meltin Bell whose telephone number is 703-305-0362.

This Examiner can normally be reached on Mon - Fri 7:30 am - 4:30 pm.

If attempts to reach this Examiner by telephone are unsuccessful, his supervisor, Anil Khatri, can be reached on 703-305-0282. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-3900.

MB / *M.B.*

Ramesh Patel
RAMESH PATEL
PRIMARY EXAMINER
1/12/09
For Anil Khatni